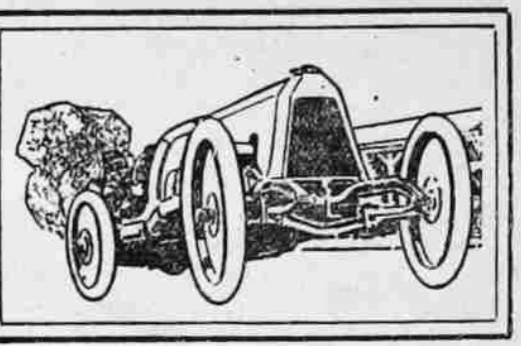


The Ogden Standard-Examiner

AUTOMOBILE SECTION



DEX B. ELLIS INVENTS NEW TIRE GAUGE

Automatically Registers Air Pressure in Auto Tire; Device Big Saving to Autoists.

There is always something new. Thousands of Americans are continually working for the betterment of the people as a whole. This is especially true in the line of new inventions. If it was not for Seiden and the years of labor he devoted to perfecting the combustible engine we would not now be enjoying the luxurious autos which are to be seen by the thousands in every city and hamlet in this country, and all over the world, as a matter of fact.

Also, were it not for the invention of the pneumatic tire, there would be no pleasure in riding in an automobile. This industry has grown from a wee start to tremendous proportions—62,000,000 tires being manufactured in the United States last year. And so far as can be ascertained, there is no real substitute for an air inflated tube, principally for the good reason that air distributes itself evenly throughout the tube and consequently gives to the outer casing an absolutely true and reliable running surface.

There is only one fault to be found with an air-inflated tube and this is that the people who use them cannot ascertain the exact pressure inside the tire without going to a good deal of trouble in unscrewing nuts and caps and testing the same with a hand gauge. Consequently, the pressure of the tire is allowed to run low and when an obstruction is encountered or a piece of rough, uneven road negotiated the fabric on the inside of the casing is broken and the casing's life shortened or ruined altogether.

Testing tire pressure by hand is a slow and irksome task, and can be entirely avoided by the use of this simple device. We used to put a stick into our gasoline tank to ascertain the number of gallons, quarts or pints we had aboard, and this method was no more cumbersome and unreliable than the method used today in tire pressure testing.

It is a well known fact, not only to experts, but the general auto-using public as well, that tires will last twice to three times as long under constant use if the same are kept at the standard pressure recommended by the tire manufacturers. This has been a difficult thing to do in the past because all tires had to be tested by hand, and the annoyance and trouble attending this method caused a great majority of the people to allow their tires to go without attention until the same were ruined by continually using them in an under-inflated condition. This method according to reliable statistics cost the American public more than \$200,000,000 last year. A nice little bill due entirely to the fact that there was no reliable means of knowing just what pressure the tire was carrying. But thanks to a new invention, patented by Dex B. Ellis of Ogden, all this expense and annoyance is to be done away with. Mr. Ellis has invented a device which fits over the valve stem of any make of automobile pneumatic tire and which projects through the demountable rim, around wheel felly and shows above in such manner that the pressure of tire is indicated accurately by large, readable figures on a brass tube. The pressure of the tire, in fact, is as easy to see as the tire itself. The device is made of brass throughout, no glass, celluloid or other breakable material enters into its makeup. In fact, the gauge is so constructed that it will outlast the life of any automobile, and is not effected in the least by acid, water or any foreign substance, and will stand as much rough handling as the car itself. It is entirely automatic in its action and requires no attention from the autoist at any time. It can be truly said that necessity was the mother of this invention, and like all inventions that are really worth while, it is the idea that counts really more than the device itself.

Mr. Ellis is desirous of placing the device on the market at once and extends an invitation to any manufacturer of reliable standing to communicate with him regarding the production and sale of the gauge.

"The gauge can be applied to any pneumatic tire within ten minutes and the tire may be removed from the demountable rim or wheel without the necessity of removing nuts, caps or anything as a matter of fact," said Mr. Ellis. "It is simple, being built on an entirely new principle. It will register the air pressure absolutely accurately and is set in such a position over the top of the felly of the wheel that it is in plain view at all times. It is small, strong and compact and adds rather than detracts from the appearance of the wheel.

It will be possible to make installations on cars in and around Weber county possibly as early as September. I have orders for more than 600 sets of gauges at this time from car owners in this vicinity, and will of course, use every endeavor to have them placed on the market as soon as possible. Those who are interested in this automatic tire saving de-

PROHIBITION IS BLESSING

Alcohol Can Be Readily Converted Into Motor Fuel, Says Local Dealer

"It's an ill wind that blows nobody any good, and prohibition may prove a blessing in disguise to the motorist as it makes available huge surpluses of alcohol—alcohol which can be readily converted into motor fuel to the confusion of gasoline extortionists and the gratification of passenger car users," according to P. J. O'Carroll, local Nash distributor.

"Already in Great Britain an empire motor fuels committee has been formed for the purpose of familiarizing motorists with alcohol and its use as a gasoline substitute. We should have such a committee here.

"There are so many ways of obtaining alcohol and so many things to obtain it from that its adaptation to passenger car use bids fair to solve the fuel problem for all time. Every crop of potatoes contains its potential force of alcohol, sawdust and shavings have it, and as for molasses—from every ton of molasses 55 pounds of power alcohol are produced.

"During the war experiments were made by the London Omnibus company, who were provided by the English government with a supply of power alcohol to enable them to work a fleet of motor omnibuses on that fuel mixed with benzole, to the utter exclusion of gasoline, and the results were entirely satisfactory.

"The soaring of gasoline prices and the soaring of light-weight, economical cars over reaping the benefit of their foresight, as the gasoline situation today has caused purchasers to ask very pertinent questions about the upkeep of cars before buying, which, however, is a good thing for the industry."

BLUE POLKA-DOT TIES

LATEST FASHION CRAZE

NEW YORK—Blue polka-dot bow ties are more man's latest fashion craze in due, they declare, to newspaper demand for dotted blue "bat wings" eclipsed any run in recent years. The craze is due, they declare, to newspaper photographs which show Sir Thomas Lipton, the famous Englishman, and Senator Warren G. Harding, the Republican candidate, wearing the "bat wings."

vice, and every tire user should be able to see it mounted on a rim and tire at the Firestone Tire Agency on Hudson avenue."

AUTO IMPORTANT FARMING FACTOR

Forty-five Per Cent of Country's Yearly Output Are Sold to Farmers

Farm equipment nowadays demands an automobile, one or more, to be complete. In the early days of the automobiles, farmers looking upon them as "chicken killers," little realized how important they would become in the agricultural districts. We often heard automobiles described as "city machines," but how different the standing of the automobile today.

Forty-five per cent of the country's automobiles are sold to farmers and residents of small towns. In addition to the utility service rendered farmers by the quick transportation to town, the creamery or a neighbor's farm, it has done much to better living conditions on the farm. Distance is eliminated and friends and relatives fifty miles away are brought near. The old buckboard drawn by a willing team had its limitations, and the family rig never did permit a very long ride. It once was an event for neighbors to drive in horses tired and children sleepy, but now it is a habit, with the automobile.

Motion pictures have been made easily accessible to the average farmer too. It is no task at all to drive into town with an automobile, see the show and get back speedily and without incident.

And, too, the automobile has done and is doing considerable to keep the boy on the farm. Probably Iowa, of all the big farming states, has taken to the automobile more than any other state. The total number of automobiles in Iowa, as of Jan. 1, 1920, was 349,635. Statistics tell us that the number of automobiles per capita in Iowa has virtually doubled during the last five years. Iowa has one car for each six inhabitants.

If at a given hour every inhabitant of the state would get into an automobile, not a soul in that state would be left behind. That shows how the farmer has taken to the automobile, and unless it served him in a utility way, and benefited his family and added to his contentment, he would perhaps move slower in accepting it.

IS BITTEN BY FISH

MAY DIE FROM POISON

(By International News Service.)
RANDOLPH, VI.—Oris Flint, of South Royallston, is at the Randolph sanitarium, in this city, suffering a severe case of blood poisoning, contracted when he was bitten by a fish which he landed several days ago. Though one finger has been amputated, physicians have been unable to check the spread of the infection. His condition is regarded as serious.

TIRES CONFUSE MOTOR OWNERS

Owners Anxious to Familiarize Themselves With Many Kinds of Tires

Owners of motor trucks on which pneumatic tire equipment is being used are subjected to some confusion in their attempts to keep straight the proper oversizes, according to the sales engineer of the Fisk Rubber company of Chicopee Falls, Mass. "The matter is not a particularly confusing one," he says, "and due to the increasing number of trucks on which pneumatic tires are being used, owners are anxious to familiarize themselves with these details.

At present there are six sizes of pneumatic truck tires on the market. They are the 34x5-in., the 35x5-in., the 35x7-in., the 40x8-in., the 42x9-in., and the 44x10-in. The line is so prepared that a 35x6-in. tire will fit a 34x5-in. rim; the 38x7-in. tire will fit a 35x6-in. rim; the 40x8-in. tire will fit a 38x7-in. rim; and the 42x9-in. tire will fit a 40x8-in. rim. There is no rim made at present for a 42x9-in. tire, and that leaves the 44x10-in. for its own size rim alone.

"All truck wheels, now constructed for pneumatics, are 24 inches in diameter, and some owners do not understand why a 40x8-in. tire can not be used on a wheel of the same diameter that will carry a 35x5-in. tire. The reason for that, while the wheel is of the same diameter in each case, the felly which is prepared to receive a rim fitted to a 35x5-in. tire, is not wide enough to carry a 40x8-in. rim. It would be well for truck owners and drivers to jot down in a memorandum book the sizes of their tires and the proper oversizes for them. Such information often proves valuable."

DOG'S TEETH, WITH PANTS

SHREDS, MAY BE CLUE

(By International News Service.)
ATLANTA, Ga.—With a segment of the seat of a pair of trousers, torn out by a bulldog, as a clue, W. L. Lively, city dog catcher, and police believed they soon would round up the thieves who broke into the dog pound Thursday night and carried off six puppies.

It was the first time that any one had ever robbed the dog pound. Persons living in the neighborhood of the pound said they were awakened by the screams of the thief who had been seized on the south side by the bulldog in the pound. They said they saw this particular burglar make a frantic dash for the fence, leap it and disappear in the darkness, the building retaining a portion of the rear section of his trousers as evidence.

BUSINESS NOW DEMANDS AUTO

Average Business Man Must Have Modern Automobile to Transact Business

"Accustomed as the average owner is to depend on his automobile, it would be hard for him to figure out what he could do without it," says D. M. Roll of the Great Western Motor company.

"It fits into his everyday life so naturally, enabling him to meet the increased business demands which today's competition have forced upon him, its utility and use not only dominate his activities, but he considers the automobile as a matter of course—an implement, or a utility, that has become as much a part of his equipment as his desk on which to write.

"There is no doubt that the automobile is purchased from a utility standpoint more than that of recreation. This is shown by the number of automobiles used for business purposes during the week as compared with Saturday afternoons and Sundays, when it is employed for recreation purposes. I cannot think of more convincing evidence of the major uses to which the automobile is put, than to check up the number of cars in any city or town, that are parked down town or as near the main thoroughfares as the law permits. It is a certainty that the cars are not down there for the fun of it, nor are they driven down there for the pleasure of it, but are parked there while the owner runs up to his office, attends a business meeting or some other activities in connection with his work."

Iron Pipe Answers to Many Motor Uses

A handy little device that serves as a jack and will lift almost any weight you can put upon it consists merely of a short length of iron pipe of large enough diameter to receive a bolt, but not the nut that goes on the bolt. Simply slip the bolt, with a nut screwed part way on, down into the end of the piece of pipe, allowing the shoulder of the nut to rest on the top edge of the pipe, and your jack is made. Having set it in position, turn up the nut and this will back out the bolt, thereby exerting a very strong lifting force. By using four of these little pipe jacks, one at each corner of the cylinder block, a very handy lifting method for the heavy iron casting is provided.—Motor Life.

MOTORISTS FAIL IN HILL CLIMBS

Many Drivers Do Not Know Proper Means of Handling Car in Hill Climbs

"How steep is the grade on this road? Well—I should say that it is all of thirty or thirty-five per cent. But I didn't have any trouble in making it with my car. No, sir. She pulled it like a house afire. Made it in high all the way. Passed two cars laboring along in second."

How often, with variations, do we hear these words from drivers proud of the achievements of their cars, frequently to the disparagement of higher priced cars from which, presumably, a better performance should be expected. After listening to statements of this kind from hundreds of tourists anxious to tell of their trips and the remarkable exploits of their cars, one is at last convinced that not one man in a hundred has the proper estimate of the percentage of a grade encountered. No reliance is to be placed on such estimates expressed by any other than one who knows from actual measurements with a gradometer.

GRADE STEEP.

Approaching an ascent, the grade naturally appears steeper than it actually is. This coupled with the performance of the individual car which may or may not make the grade in high gear gives rise to an incorrect estimate of the percentage of the grade.

Many motorists do not understand the process by which the designation of a grade percentage is arrived at, believing that a 20 per cent grade, for instance, is one which rises at an angle of twenty degrees from the horizontal. This is erroneous. The designation of 20 per cent to a grade means that in that grade there is a perpendicular rise of twenty feet in one hundred horizontal feet. In other words, to generalize, the numerical percentage of a grade indicates that number of feet, perpendicular rise in one hundred feet. In relation to degrees it will be found that a grade percentage properly arrived at in this way forms an angle equal to about one-half of the angle formed when the numerical expression is taken to mean degrees. Definitely, a 20 per cent grade is about one-half as steep as the grade formed by a 20-degree angle from the horizontal.

FIRE BURNS; THIEVES STEAL.

DENVER.—During a hotel fire here diamonds valued at \$1450 are alleged to have been stolen from the room of Mrs. Lillian Horn.

PROSPECTS HAVE MANY PROBLEMS

Salesman Has Many Big Features to Explain in Selling Car to New Owner

When the average American business man makes an investment involving anywhere from \$1,000 to \$5,000 he investigates the matter from all sides and calls in expert advice on which he can depend if any phase of the subject seems to be a little beyond his personal experience. When that same supposedly hard-headed business man purposes to invest a similar amount of money in a motor car he generally walks down automobile row and buys the vehicle that catches his fancy, matches his wife's new furs or meets some equally unessential condition.

The question of price generally settles itself automatically. The buyer knows about what figure he can afford to pay. His first step should be to get a list of all cars in the price class in which he is interested. From these he can narrow down his search and make a reasonable definite list of eligibles, for closer scrutiny.

To be a satisfactory buyer a car must be manufactured by a well established company which will remain in business. If the concern making the car fails the vehicle becomes an orphan, for which it is difficult to obtain parts. Be sure that the manufacturer is solidly established in business.

PROBLEMS—OH, ROY!

Next the dealer should be scrutinized. Has he facilities for making quick repairs? Is his service efficient? Is he able to give his customers replacements or broken parts without undue delay? All this is going to be vitally important during the later life of the new car, and the dealer's status is easily established by a few inquiries made among owners of the make of car he sells.

Face to face with the car itself the first thing for the intending purchaser to settle is the size of the vehicle that will best serve his needs. Common sense will rule here. The prospect should certainly be careful to try the seats, all of them, to see that they are perfectly comfortable. A long-legged man in a car with skimpy room is in for much discomfort. If the buyer is to do the driving he should be sure that the pedal and steering controls are placed within reasonable reach for his physical limitations.

MECHANISM NEXT

Having examined the external qualifications of the car, the buyer should next proceed with an investigation of its mechanical efficiency. And right here we should emphasize the desirability of the intention of ever securing the help of some qualified expert on whose integrity he can rely to help him weigh the mechanical merits of the vehicle under consideration. Of course if the prospect is qualified to decide for himself through past experience he will need no outside experience.

First as to the performance desired in the average man's motor car. To begin with local conditions will somewhat govern this factor. If the car is to be used in a hilly country, it must have plenty of superfluous power, and no matter where it is to be used it should have a modest turn of speed good acceleration and flexibility. This latter qualification means that it must be able to throttle down to a slow speed while in high gear and must also be able to travel fast. A range of speed on high gear of from four miles an hour to sixty would be good flexibility. These three factors and the hill-climbing ability of the car should be brought out in the road demonstration, and a motorist of experience should be in the car with the intending buyer, unless he is a veteran, to make sure the vehicle meets all these conditions.

And now we come to the vitally important matters that lurk under the hood. It should be ascertained that all the parts, particularly those that are certain to need cleaning or adjustment, are easily accessible. Are the oil and grease cups easily reached for adjustment and refilling? Can the differential housing be reached to drain flush, and refill it at all intervals when this is necessary? Are the brake adjustments easy to make?

Getting down to the more technical details of the mechanism, it should be ascertained that the car under consideration embodies parts that are big enough for the work they are called upon to perform. This applies to gears, springs, shafts and similar parts. Obviously, determination of these is beyond the average car buyer, especially if it is his first car. Inquire about among owners of the car in your neighborhood. See if there is a general or frequent complaint of a certain failure or breakage. If there is, you may put it down that the vehicle has a structural weakness.

Wheel Duty Important Factor in Auto Driving

Every motorist knows that the wheels are subject to thousands of road jolts in every mile traveled, that they withstand enormous side thrust on every trip, that they work constantly insofar as they support the weight of the car at all times, still, the fact that they never "kick up a fuss" really keeps a true appreciation of wheel duty and upkeep in the background and prompts the motorist to pass the wheel without examination when he makes a inspection of his car.

Considering that wood wheels are working parts, and their duty is a grueling one, this is hardly to be wondered at. The fair, the scratch that develops rust on another part of the car is quickly painted over. But how about the scratches that expose the grain of a wood wheel to the elements? They are rarely attended to, even tho a little dab of paint, or varnish in case the color cannot be matched, will help to preserve the wood.

Very little attention is necessary. When tires are examined, it only takes a moment to glance at the wheels. If the hub bolts require setting up, a few minutes and a hand wrench are all that is necessary.—Motor Life.

Automatic Air Pressure Register Gauge

Cannot leak air. Registers accurately from 25 to 125 pounds. Can be applied to any make of tire. Will outlast life of any car. Cannot fail to work under any and all conditions. Always in plain view. You can see the pressure of your tire at all times as easily as you can see tire itself.

No bolts, nuts, caps---nothing to remove when inflating or removing tire for repairs.

This gauge is made entirely of brass, has no celluloid, glass or other breakable material of any nature. Can be adjusted to fit any tire made and is altogether automatic in its action. It will save one-half the cost of tire bills, if you watch the gauge and keep your tire at proper pressure at all times, which is easy because you can see tire air pressure at any time.

Any large, responsible concern is invited to communicate with Dex B. Ellis, 770 24th street, Ogden, Utah, regarding manufacture and sale of this device.

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